WIN-T/JTRS Migration

By Scott Long

This article serves as a progress report as well as a tribute to the many talented professionals who have collectively worked to overcome some very complex issues in the initiative to transition the military intelligence community out of the communications business through migration of the communications functionalities of Trojan Spirit systems to WIN-T.

Included among those who have labored to make the present progress possible are representatives from the U.S. Army Signal Center of Excellence; the U.S. Army Intelligence Center of Excellence and their acquisition partners; program executive officers from Intelligence, Electronic Warfare and Sensors; and Command, Control, Communications, and Computers-Tactical.

Excellent leadership coupled with determination and dedication of all the participating partners, has set the stage for some very beneficial network enhancements to the operational Army, along with some potential cost savings that could come with a more converged network.

While we have not reached the end point, everything is lining up for success.
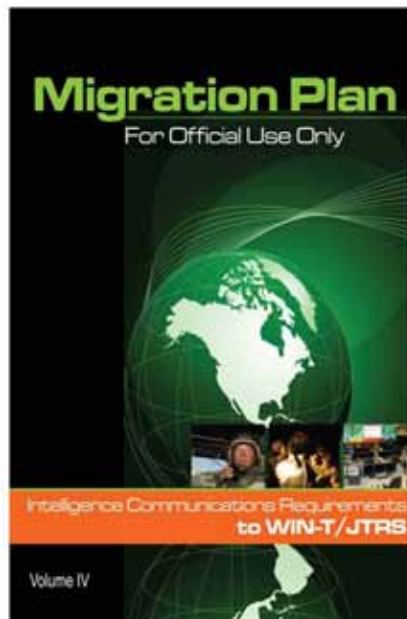
Converging networks is not easy. If it were, all of the mission specific systems developed by other Army proponents such as CSS, ADA, and the medical community, would be moving in a similar direction.

In fact, TRADOC and ARCIC have directed the Signal Center of Excellence to develop and lead a Network Convergence Plan that addresses these other mission specific systems in ways that are financially and operationally beneficial for the Army.

Background

Mission specific systems and supporting networks have been resourced and developed for many years for a variety of valid reasons. In the case of MI, this situation goes back to the 1980's when Mobile Subscriber Equipment was being developed and resourced.

It was determined that it was not cost effective to address TS/SCI requirements in the MSE program as the Army moved forward to field MSE Army-wide as a Battle Command focused and secret-high system. This decision to go with a secret-high network set the stage for an agreement at HQDA between the ODISC4 and the G-2 that eventually resourced HQ CECOM and HQ INSCOM to develop the TS systems to meet operational TS/SCI requirements at echelons division and above.

It should be noted that the initial TROJAN communications systems were built as part of TROJAN Classic to meet training requirements for linguists in garrison locations around the world. However, beginning with first Gulf War in 1990-1991, the TS system was deployed to help meet TS/SCI requirements operational at corps and above.

These initial 13 TS systems were so successful that requirements grew to 38 systems by 1998. This highly successful and highly capable TS system, along with the elaborate supporting TROJAN infrastructure funded by the Army G-2 and HQ INSCOM, has not come cheaply. MI Soldiers, typically full time analysts, continue training to do TS/SCI communications transport functions. Additionally, requirements and supporting resources have grown from 38 TS systems to more than 200 systems that provide TS/SCI support down to the BCT level.

As TS/SCI requirements continue growing, and as funding is shrinking for the entire Army ISR portfolio, it is even more important for the Army G-2 to disengage itself from the business of paying for communications. This emphasizes that there are three elements necessary in the implementation of network convergence. First, there must be a user that wants to get out of the communications business. Second, there must be an Army network provider that wants to expand its capabilities to meet user requirements beyond Battle Command. Third, there must be an Army staff and senior leadership motivated and determined to achieve and mutually agreeable network convergence. In the case of this migration effort, all three elements are in place.

Plan Purpose and Approval Process

The plan is the only HQ TRADOC approved Migration Plan of its kind. It continues to serve as the single, unified plan for the articulation of MI concepts and communications requirements, and the eventual transfer of responsibility for these requirements to the Army's WIN-T and JTRS capa-

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bilities. The plan is updated every three years in order to stay aligned with the Office of the Secretary of Defense, Joint, Headquarters, Department of the Army guidance, Land Warfare Network concept of operations and changes in Distributed Common Ground System-Army communications requirements, lessons learned and Future Force concepts.

The plan, as in past editions, is a venue to press for change. From a network perspective, the plan documents where we are, where we are going, and what we're doing to get there. We use the validated requirements in this plan to make adjustments to our supporting TS, WIN-T, and JTRS programs. This process allows us to keep pace with user requirements while being mindful of fiscal realities.

The Migration Plan took about 18 months to deliver. Like the three previous plans, organization, teamwork, and colonel-level oversight were the key for final plan approval. A council of colonels, composed of 20 members from TRADOC, HQDA, and stakeholders in the acquisition community, met on three occasions to review and shape the plan. The plan was signed by MG John Custer, ICOE commander, and BG Jeffrey Foley, SIGCOE commander, on 18 Nov 2008. On 23 March 2010, LTG Michael Vane, ARCIC director, provided his endorsement of the plan and sent it on to the director of Army G3/5/7 LandWarNet Battle Command Decision Forum "for tracking and resourcing as a priority item."

The Importance of Validating User Requirements
In order to make sure that the plan focused on "user requirements," the ICOE set up a working group and launched a 15-month journey to lay out the best and most comprehensive lay-down of Intelligence Warfighting Functional Area information exchange requirements ever submitted to the SIGCOE. This was the lynchpin in the plan to help the TRADOC Capability Manager for Networks and Services and the PM WIN-T understand the validated user requirements for both current and future force.

The IWFA communications requirements data supporting this plan were derived from integrated net-centric intelligence operational architectures supporting intelligence center capabilities documents for programs such as DCGS-A, Prophet, ACS, CHARCS, Biometrics, and Language Translation. It also used information from the Army G-2 ISR baseline architecture and theater of operations lessons learned. The supporting intelligence architecture operational view products capture the operational nodes, the tasks or activities performed, and the information that must be produced and consumed to accomplish intelligence warfighting missions from nodes at the Theater Brigade level down to CI and HUMINT Teams.

The analysis process will continue to mature the information exchanges supporting the IWFA

communications requirements analysis and will inform the DoD Architecture System and the Army Architecture Repository and Management System, TRADOC Architecture Integration and Management Directorate for inclusion in the information exchange database after completing the Army Intelligence Center Proponent and Council of Colonels validation process.

After loading the IER information into the AIMD data base, the Experimentation Division of the Capabilities Development and Integration Directorate, SIGCOE converted the data in order to support the modeling and simulation tools used by PM WIN-T. WIN-T uses modeling and simulation to provide a disciplined approach to developing a level of understanding of the interaction of the various parts of the WIN-T network and the performance of the WIN-T network as a whole. The level of understanding, which may be developed through this discipline, is seldom achievable by any other means. Systems engineers use the results of modeling and simulation to help drive network design decisions.

Experimentation Support
Based on General Officer directives coming out of the 2005 Migration Plan, the SIGCOE Center's Experimentation Division, in coordination with TRADOC's Chief of Studies and Analysis and ICOE CDID participants, conducted a live network TS/SCI experiment at Ft Gordon. The experiment was designed to evaluate the technical feasibility of providing JWICS and/or NSA Net connectivity for TSCIFs located at the BCT Main CP, TAC CP, and the RSTA Squadron using the existing Network Service Center-Training and Joint Network Node and the Battalion Command Post Node capabilities.

It should be noted that back in the 2005-2006 timeframe, the Signal Regiment successfully fielded TS/SCI capabilities to the BCT and battalion level in Operation Iraqi Freedom as part of the Joint Intelligence Operations Center – Iraq initiative. However, 2007 experiment was necessary to prove that the JNN network could handle future force IFWA communications requirements identified by the ICOE. These requirements far exceeded those in OIF, particularly in the area of future force DCGS-A BCT information exchanges. The goal was to work shoulder to shoulder and identify any technical capability shortfalls in JNN using "measured" network traffic loads and profiles from operational Trojan SPIRIT and JNN networks as well as the IERs and Critical Operations Issues Criteria provided by the ICOE.

In November of 2007, the Director of the Experimentation Division reported that the experiment demonstrated that the JNN Network, with minor configuration changes, had the capability and scalability to support the additional TS/SCI

traffic requirements for both current and future forces as defined by the Intelligence Center's COIC. Based on the operational assessment of the Intelligence Gateway-Configured Joint Network Node at the BCT Main and TAC CP, as well as the CPN at the RSTA BN, it was determined that there is low technical risk to place the TS/SCI traffic requirements identified by the Intelligence Center onto the JNN Network currently fielded to the BCT.

The Experimentation Final Report was sent to ARCIC under the signatures of BG Foley and MG Custer with recommendations to complete the programmed fielding of TS systems to the BCT formations to help ensure current TS/SCI requirements for the BCT Commanders are met while we begin moving towards a common transport WIN-T transport architecture with tunneling packages called Intelligence Gateways (IG). Also, to plan and resource the IGs and the TNCC provided network services to enable the BCT Main, TAC CP, and RSTA Squadrons to begin operating TS/SCI over WIN-T as soon as possible. Lastly, for the G-8 to account for IG requirements in the Combat Aviation Brigades, Fires Brigades, and BFSBs even though those unit requirements were not formally assessed in the experiment. MG Fast at ARCIC supported these recommendations and sent the report forward with her full endorsement on 10 Dec 2007.

Current Agreements, Explanations, and Updated Status

The remainder of this article will be devoted to a fairly detailed summary of the 2008 Migration Plan agreements as well as an update of activities associated with each of the agreements. Many of these agreements were years in the making as we worked though one major issue after another to ensure a coordinated way ahead.

Agreement #1: No more Trojan SPIRIT Version 2 or 3 Systems will be resourced by the Army Staff once the fielding to Brigade Combat Teams is completed. In other words, the Signal Regiment is now responsible for "have not" units, e.g., those Brigade level and lower units who have TS/SCI network requirements, but who are not programmed to get a TS LITE.

Discussion: This agreement was made in coordination with G-8 (FDC and FDI) and Army G3/5/7 in order to draw a "line in the sand" and move toward a WIN-T provided transport capability for all TS/SCI users. The Council of Colonels and General Officers all felt that it was operationally prudent to complete the fielding plan for TS LITE V3 systems to each BCT. Everyone also felt that based on JIOC-I successes with tunneling packages and JNN transport, as well as the 2007 Experiment, PM WIN-T provided TS/SCI solutions and WIN-T Increment I transport were more than adequate to meet any new TS/SCI requirements at the Brigade level and lower if and when approved by the Army G3/5/7.

This decision was supported by a corporate decision made by the Army G3/5/7 (DAMO-FMO) on 24 Aug 07. In a memo back to the CG, US Army CAC, Fort Leavenworth, Subject: Requirement Determination for Trojan SPIRIT Systems in the Aviation Brigade, Fires Brigade, and the Battlefield Surveillance Brigade (BfSB). The G-3/FM acknowledged a requirement for TS/SCI for Fires Brigades, Combat Aviation Brigades, and the BFSB.

However, the TRADOC request to add these units to the Trojan SPIRIT basis of issue "is returned without action because there are other alternatives to provide this capability to each organization. An objective material solution for TS/SCI in Aviation Brigades and Fires Brigades will be to use tunneling of TS/SCI through the WIN-T Increment 1, which has been successfully demonstrated in theater." This decision was heavily influenced by the feedback that the Army Staff was receiving from the TS/SCI Experimentation at the SIGCOE, as well as reports back from OIF on the successes of Signal-provided TS/SCI for JIOC-I. The memo did authorize one Trojan SPIRIT per BfSB HQs (against a requirement for two), but stated that any additional requirements would be reviewed against the WIN-T material solution.

In September 2009, the Army G8 FDC made a decision to fund three TS/SCI tunneling packages for the Experimentation Division of CDID, SIGCOE. These IGs were shipped to the Experimentation Division by PM CHS, in coordination with PM WIN-T Increment 1. These IG's were used for further experimentation in October 2009 and again in January 2010 to test the WIN-T Increment 1 network using live TS/SCI traffic. With support from the 513th MI Brigade (TSCIF and the "tactical users"), the 442nd Signal Battalion (JNN equipment and operators), FORSCOM G6 (SATCOM air time), the Network Service Center for Training at Fort Gordon (technical expertise and Tactical Hub support), and the Trojan TNCC (IP addresses, Crypto Key, NETOPS support), the experiments picked up where the 2007 Experiment left off.

The intent of the "live" TS/SCI testing was to conduct a Phase II validation of the July 2007 event, which used simulated BCT information exchanges to prove that the TS/SCI tunneling package over WIN-T/JNN was a low risk. While not an easy experiment, the team assembled to conduct these live experiments successfully provided both JWICS and NSA Net connectivity to the MI users over WIN-T Increment 1 transport through the NSC-T and the TNCC. The operators at the 513th MI Brigade stated that they had more than adequate quality of service as they pushed and pulled information across the network using DCGS-A applications connected

Integration of multiple Intelligence Warfighting Functional Area (WFA) Architectures
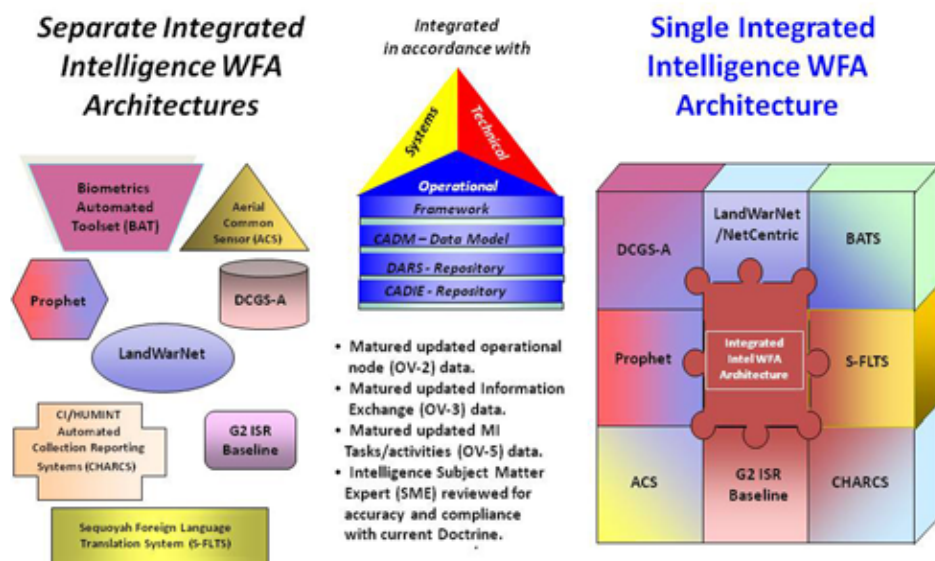
The systems architecture of the experiment.

to the DIB, including MASINT, IMINT, and SIGINT products. A systems architecture of the experiment appears at the top of the next page.

In December 2010, the 101st CAB submitted an ONS requesting a TS LITE to meet their TS/SCI requirement for an upcoming operational deployment. The Army G3/5/7 returned the request without action in favor of a tunneling package and the organic JNN/CPN SATCOM transport provided by the organic Signal Company in the CAB. In March 2010, following the live TS/SCI experimentations at Fort Gordon, an IG was shipped to Fort Monmouth for inspection, configuration, and shipment downrange to the 101st CAB. In anticipation of the shipment, the 101st CAB S2 and S6 had to work together to build a TSCIF, complete the accreditation package, and get approval to operate by INSCOM G6 before the issue of TS/SCI IP addresses. This work has been completed at the time this article was submitted and the CAB was in the process of having the IG installation done with the help of field ser-

vice representatives funded by HQ INSCOM.

When the Army G3/5/7 responded to the 101st ONS in Feb 2010, the chief of the Current and Future Warfighting Capabilities Division reiterated the need for a Detailed Technical Procedures (DTP) assessment and plan with the steps necessary to connect TS/SCI networks to JNN and provide signal transport to the supporting network control center. This DTP guide was sponsored by the Experimentation Division at CDID SIGCOE and was developed with assistance from PM WIN-T Increment 1, CERDEC I2WD, HQ INSCOM and TROJAN Network Control Center subject matter experts. That DTP (Draft 1.0) was sent to PM WIN-T, PM RITE, and HQ INSCOM in time to assist with the 101st CAB fielding. The DTP continues to be used to inform the development of the WIN-T STRAP for Increment 3 and will be adjusted over time.

In the Summer of 2010, as part of the Army G-2's Relevant Intelligence to the Edge initiative, additional requirements for TS/SCI to the maneuver

battalion level were approved by the Army G3/5/7. These requirements will be met with PM WIN-T provided tunneling packages to be used over Signal provided transport being fielded and coordinated by PEO C3T and CENTCOM J6. These TP's are the precursor to the WIN-T Incr 3 provided Modular Communications Nodes-Top Secret, the permanent WIN-T POR material solution for TS/SCI users. The MCN-TS will be discussed later.

Agreement # 2: Migration of TS LITE systems to WIN-T will begin in Increment 3 of WIN-T (circa 2015-16). However, there will be no replacement of TS LITE systems until WIN-T has been determined as a suitable replacement by Army Staff.

Discussion: The existing TS systems in the Army today, from TIB down to BCT level, will eventually be replaced with Signal provided tunneling packages called MCN-TS along with transport and NETOPS functionality that come with WIN-T Increment 3 in the 15-16 timeframe. One of the key agreements as the Army gets closer to this replacement effort is that communications support provided by Signal must be good enough to provide capabilities required in order to conduct intelligence operations.

The Army staff will be the deciding vote on when the replacement of Trojan SPIRIT occurs. Army leaders will continue looking at the ongoing TS/SCI capabilities being provided now and over the next year or so by PM WIN-T Increment 1 and PEO C3T. As we measure the effectiveness of the tunneling packages that will be riding WIN-T/JNN transport in the CAB and Fires Brigades, as well as the battalions "downrange," adjustments will be made and improvements evaluated. TTP's will be developed and refined. Risk will continue to be reduced through equipment adjustment as well as effective training on troubleshooting and teamwork

that is required between the Brigade/Battalion S2, S6, and supporting network managers.

Army leaders want this Migration Plan to succeed. There are some real potential cost savings to be gained by the migration of TS to WIN-T. The key to these savings is for the PEO C3T to deliver a TS/SCI capability to the MI users that allows the successful conduct of intelligence operations. No one wants an unhappy customer. No one wants DCGS-A to fail at the TS/SCI level because of a lack of network support. But one thing everyone needs to keep in mind. There is only so much bandwidth for a deployed force. Physics cannot be altered in terms of available SATCOM. That is why Army leaders and PEO C3T are working so hard to develop a robust network extension aerial layer to go along with the SATCOM and terrestrial layer of communications support.

At some point, this all may lead to the BCT commander making hard decisions on who gets what bandwidth at a given time. The S6 will execute the Commander's intent using NETOPS tools that are being developed by the Army as part of LANDWARNET.

Agreement # 3: The Trojan program will not be a "bill-payer" for Signal manpower as Trojan SPIRITs are replaced by WIN-T. However, MI soldiers will help install, operate, and maintain the tunneling packages with assistance from the S6 and G6.

Discussion: This has been a delicate topic. It has literally taken years to get past the emotional discussions and heated disagreements that played out as part of the earlier Migration plans with regards to personnel and "bill-payers". The Army staff Council of Colonels members involved in the staff coordination of this plan were quite clear on the matter of personnel. The fact is that that when each TS system goes away, so do the operators. The SIGCOE and the ICOE agree that the ICOE capability developers should submit a Force Design Update calling for additional MI force structure that accounts for the potential loss of these soldiers that go away along with the TS systems. The Army bill, if the FDU is approved, could be paid from those soldiers.

So to reiterate, the current plan is for the ICOE to submit an FDU so that these three MI 35 series MOS soldiers remain MI in order to continue supporting DCGS-A functions at the Battalion, Brigade and Division levels that have been identified as part of the MI rebalance initiative.

While the SIGCOE continues to advocate an increase in Signal force structure as part of the ongoing Functional Area Analysis process, there is no new force structure required to make this Migration Plan a reality. However, the SIGCOE will require adjustments to the STRAPs for WIN-T Increment 1, 2, and eventually 3 as PM WIN-T provided tunneling packages are fielded to the force. The DTP discussed above serves as a good start point

to adjust the STRAPs. The STRAPs must cover not only the training requirements for the SIGCOE, but the ICOE as well as we move beyond FSR's to NET Teams to Schoolhouse training.

The current strategy is for the WIN-T provided tunneling packages to be added to the BCT's MI Company S2 Section. From a network management perspective, the demarcation point between Signal and MI responsibilities in the BCT or Support Brigade is the Cipher Text input of the IG Cryptographic Controlled Item. Signal personnel are responsible for getting the signal to that point Additional bandwidth must be allocated to account for the TS/SCI user requirements as part of the overall Command and Control network.

The amount of additional bandwidth must be determined by the S2, the S6, and the S3 operations staff in order to meet the Commander's intent. Practically speaking, no single bandwidth figure can be set for all situations. Thus, a combined effort between the Brigade staff will be required to provide adequate quality of service for TS/SCI uses if and when requirements increase. Suggested Quality of Service settings for the tactical Signal node are provided in the DTP. The Signal staff will be required to liaise with the Unit hub node and the Regional Hub Node to arrange appropriate QoS settings at the distant end.

MI will need to take responsibility for the TSCIF physical space (fixed or mobile) and the associated accreditation requirements. Also, if required by the S2, MI will be responsible for switching and terminal equipment for NIPRNET and SIPRNET services inside the TSCIF. The S2 is also responsible for all network issues from the Plain Text side of the IG CCI. This includes all routing configuration information for TS/SCI services. It is envisioned that the operation and maintenance of IG and terminal equipment hardware will be an MI responsibility, as well as the training of analysts/operators to maintain the circuit(s). If connected to the TNCC, the operators will be assisted by the help desk personnel at the TNCC's at either Ft Belvoir or Ft Bragg. If connected to NSA or DIA provided service nodes, the S2 will need to ask for assistance from those help desk personnel if the S6 cannot resolve the problems.

Agreement # 4: TS/SCI users will continue to get their TS/SCI network management support from the Trojan Network Operations Support Centers (TNOSC).

TS/SCI reach-back network services performed by the Trojan Network Operations Center in support of field users will not be replaced by the WIN-T Program, even in Increment 3. In other words, MI users in TSCIFs being supported by WIN-T in both Current and Future Force formations will be getting their TS/SCI services from the TNOC or a forward deployed DIA or NSA Regional Service Center. Signal provided Network Service Center- Regional facilities will be able to transport data to the TNOC or other Service Centers in a manner that assures TS/SCI users get the required

quality of service and connectivity to these specialized services.

If and when an S6 or G6, in coordination with the supporting S2/G-2 decide to access TS/SCI networks through theater provided access points, such as a DIA provided JWICS point of presence, they must work with that agency to obtain accreditation, IP addresses, crypto key, etc. that is otherwise provided by the Trojan office/TNOSC at INSCOM.

As part of the 101st CAB fielding in OEF, it was determined by NETCOM and the supporting AGNOSC that they will need to work closely with DISA to overcome the roadblocks that the unit encountered. In the reach back testing that was done by the S6 of the 101st CAB, it became difficult and frustrating getting back to CONUS on NIPR and SIPR through the many firewalls and routers along the way.

While the short-term problems were resolved, the NETCOM G3 and the TCM GNE have taken on the challenge and agreed to roll these networking issues up under Operation Guardian Enable to add to their problem set of things they are trying to solve.

Most Current Acquisition Strategy for Tunneling Packages

The phased acquisition and fielding of TS/SCI Tunneling Packages is now underway.

Phase I - (2010 timeframe) – SCI access, theatre provided equipment, PM WIN-T and G8 FDC funded. The installation of this equipment is performed by FSR's. The FSR's along with network management support at the TNOSC is INSCOM/G-2 funded. The IG design for this phase is based on Trojan equipment standards (3 systems). These systems basically support ONS requirements for CABs and Fires Brigades as determined by the Army G3/5/7. The 101st CAB is the first unit to get Phase I equipment.

Phase II – (2010-2011 timeframe) - SCI access, Theatre

provided equipment, PM WIN-T Incr 1 funded, design based on Trojan equipment or Talon Card (48 systems). These systems support C5ISR ONS requirements.

Phase III – (2013-2015) timeframe (Unresourced) – JWICS and NSA access, PM WIN-T provided equipment - Modular Communications Node - Top Secret (MCN-TS). Signal funded. Target units will be the "have not" Brigades, to include Fires, CABs, and BCT TAC CP's. These systems support WIN-T CDD requirements. However, no approved requirements document, such as a CPD for Increment 3 or a separate ACAT 3 CPD, exists at this time.

Phase IV – (2016-2024) (UNRESOURCED) - PM WIN-T Incr 3 provided MCN-TS. This phase replaces Trojan LITE functionality for TS/SCI Networks . These systems also support WIN-T CDD requirements. However, once again, there is no approved CPD for Increment 3 of WIN-T at this time, and thus no resources to conduct this Phase.

The Way Ahead

There is much work to do to continue to Migration Plan momentum. There are discussions of another plan to help ensure that we continue to focus on the latest MI requirements changes for initiatives like Relevant Intelligence to the Edge and the Army MI Rebalance initiative.
In the mean time, we need to make sure that the tunneling packages that are fielded to the force in Phases I and II of this plan are successfully integrated into the Army's LandWarNet. We must also continue to develop standards, procedures, TTPs and STRAPs to begin shaping the institutional Army for the changes in the training base.

The TRADOC Capabilities Manager for Network and Services and the TRADOC Capabilities Manager for the Global Network Enterprise will continue to collaborate with DISA, INSCOM, and the Intelligence Center of Excellence to include lessons learned and the IERs in this plan in support of WIN-T Increment

2 and Increment 3 modeling and simulation efforts. The results of WIN-T modeling and simulation will help to predict the ability of the WIN-T's Increment 2 and 3 networks and supporting hub-nodes to support overall "end to end" MI communications requirements.
It is also up to the Army staff to provide the resources needed by PM WIN-T to begin the replacement of over 200 Trojan SPIRIT systems.

Until the communications functionality of Trojan SPIRIT LITE is fully migrated into the WIN-T program, the TROJAN systems and the infrastructure must remain technologically relevant to MI users. Likewise, the enduring technology improvements required to sustain the Trojan network must have consistent MI and Signal leadership support while we continue to work together to converge these two networks and achieve the migration plan end-state.

The WIN-T POR continues receiving a tremendous amount of scrutiny as an ACAT I Program. Increment 2 of the POR has been approved and fielding will be underway beginning in 2011. The question remains, "when can we begin to replace the functionality of TS systems?" Currently, the plan is for migration to begin in 2016 and beyond as part of Increment 3. As stated earlier, the Increment 3 CPD has not been written. It is hard to say exactly what we can do in the mean time without creating adverse effects on the POR.

The primary components for TS replacement will actually be fielded as part of Increment 2 (Tactical Communications Nodes, and Quad Band SATCOM terminals). The only exception is the MCN-TS packages. MCN-TS packages are fundamentally COTS products. The SIGCOE and ICOE will be collaborating to with their acquisition partners to find a way to move forward sooner rather than later to begin this migration.

So my advice to the reader

is stay tuned. We are making great progress. Our Migration Plan is "one of a kind" at this point. We need to keep working together for all of the right reasons--most notably- the warfighter!

COL (Ret) Scott Long entered the Army in 1970 and retired from the Signal Regiment and the Army in 1995. He currently serves as the PEO IEW&S and ICOE Liaison to the SIGCOE, CDID, and Fort Gordon, Ga. He is in his 15th year in this capacity as the INTEL LNO and has helped lead the Migration Plan effort since 1998.

ACRONYM QuickScan

ACAT - Army Category
ACS – Aerial Common System
ADA - Air Defense Artillery
AGNOSC - Army Global Network Operational Support Center
AIMD - Architecture Integration and Management Directorate
ARCIC - Army Capabilities Integration Center
BCT – Brigade Combat Team
BfSB - Battlefield Surveillance Brigade
BG - Brigadier General
BN - Battalion
C2 - Command and Control
C5ISR - Command, Control, Communications, Computers, Coalition Intelligence, Surveillance, and Reconnaissance
CAB – Combat Aviation Brigade
CCI - Cryptographic Controlled Item
CDD - Capabilities Description Document
CDID - Capabilities Development and Integration Directorate
CECOM - Communications and Electronics Command
CERDEC – Communications Electronics Research and Development Engineering Command
CHARCS - Counterintelligence/Human Intelligence Automated Collection Reporting System
CHS - Common Hardware and Software
COIC - Critical Operations Issues Criteria
CONOPS - Concept of Operations
COTS - Commercial off the Shelf
CP - Command Post
CPD - Capabilities Production Document
CSS - Combat Service Support
CT - Cipher Text
DCGS-A - Distributed Common Ground System- Army
DIA - Defense Intelligence Agency
DISA – Defense Information Systems Agency
DTP - Detailed Technical Procedures
FDU - Force Design Update
FORSCOM - Forces Command
JTRS - Joint Tactical Radio System
HQDA – Headquarters, Department of the Army
I2WD - Intelligence and Information Warfare Directorate
ICOE - Intelligence Center of Excellence
IER - Information Exchange Requirement
IWFA - Intelligence Warfighting Functional Area
IMINT - Imagery Intelligence
INSCOM - Intelligence and Security Command
IG - Intelligence Gateway
IP – Internet Protocol
ISR – Intelligence, Surveillance, and Reconnaissance

JIOC-I - Joint Intelligence Operations Center- Iraq
JNN - Joint Network Node
JWICS - Joint Worldwide Intelligence Communications System
LITE - Lightweight Integrated Telecommunications Equipment
MASINT - Measurements and Signatures Intelligence
MCN-TS – Modular Communications Node- Top Secret
MG - Major General
MI - Military Intelligence
MOS - Military Occupational Specialty
MSE - Mobile Subscriber Equipment
NET - New Equipment Training
NETOPS - Network Operations
NIPRNET - Non-Secure Internet Protocol Network
NSA - National Security Agency
NSA Net - National Security Agency Network
NSC-T - Network Service Center – Tactical
NSC-R - Network Service Center- Regional
OIF - Operation Iraqi Freedom
ONS - Operational Need Statement
PEO C3T – Program Executive Officer for Command, Control, Communications, and Computers- Tactical.
PEO IEW&S – Program Executive Officer for Intelligence, Electronic Warfare, and Sensors
PM - Program Manager
POR - Program of Record
QoS - Quality of Service
RITE - Relevant Intelligence Surveillance Reconnaissance to the Tactical Edge
RSTA - Reconnaissance, Surveillance, and Target Acquisition
SATCOM - Satellite Communications
SIGCOE – Signal Center of Excellence
SIGINT - Signals Intelligence
SIPRNET - Secret Internet Protocol Network
SPIRIT - Special Purpose Intelligence Remote Integrated Terminal
STRAP - Systems Training Plan
TAC CP - Tactical Command Post
TIB - Theater Intelligence Brigade
TNCC - Trojan Network Communication Center
TNOSC - Trojan Network Operations Support Centers
TRADOC - Training and Doctrine Command
TS - Trojan SPIRIT
TSCIF – Tactical Secret Compartmented Information Facility
TS/SCI – Top Secret/Sensitive Compartmented Information
TTP - Tactics, Techniques, and Procedures
WIN-T – Warfighter Information Network – Tactical